

# Atlantic Richfield Company

**Chuck Carmel**

Remediation Management Project Manager

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August 20, 2014

**RECEIVED**

*By Alameda County Environmental Health at 10:33 am, Aug 22, 2014*

Re: Addendum to Groundwater Investigation and Vapor Intrusion Assessment Work Plan  
Former Atlantic Richfield Company Station #569-A  
1900 Webster Street, Oakland, California  
ACEH Case #RO00003100

I declare that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct.

Submitted by,



Chuck Carmel  
Remediation Management Project Manager

Attachment



**BROADBENT**

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August 20, 2014

06-88-602

Atlantic Richfield Company  
P.O. Box 1257  
San Ramon, CA 94583  
Submitted via ENFOS

Attn: Mr. Chuck Carmel

RE: Addendum to Groundwater Investigation and Vapor Intrusion Assessment Work Plan, Former Atlantic Richfield Company Station No.596A, 1900 Webster Street, Oakland, California; ACEH Case No. RO000.3100

Dear Mr. Carmel,

Broadbent & Associates, Inc. (Broadbent) is pleased to present this second addendum letter proposing additions to the scope of work to the Groundwater Investigation and Vapor Intrusion Assessment Work Plan (Work Plan; Broadbent, 2014) at former ARCO Station No. 596A located at 3100 Webster Street, Oakland, Alameda County, California (Site).

The Work Plan was originally conditionally approved by the Alameda County Environmental Health Agency (ACEH) in a meeting in September June 6, 2014. However, shortly after that meeting it was ascertained that additional investigation activities had been recently conducted by the current property owner and report documenting these activities would be submitted shortly. It was agreed upon by the ACEH and BP that this forthcoming report would be reviewed prior to finalizing a revised scope of work. This report was prepared and submitted by P&D Environmental (P&D) on June 11, 2014 (P&D, 2014). The content of this report was reviewed and discussed at a meeting between BP, the ACEH, Broadbent, and P&D on July 31, 2014. During that meeting, it was noted that there is a potential offsite source upgradient of the Site that should be evaluated. A total of three additional borings for the groundwater investigation were agreed to during this meeting. The locations of these boring are included in Drawing 1. Details of the additions to the scope of work are presented below. All procedures and previously proposed investigation activities outlined in the Work Plan will be proposed with the following additions.

#### **ADDITIONAL SCOPE OF WORK**

In order to evaluate the potential of an upgradient petroleum hydrocarbon source, three additional are proposed. These borings are located between the Site and the potential offsite source, which is located at 1732 Webster Street. The locations of these proposed borings are included in Drawing 1. These activities include advancing a total of three additional direct push borings (SB-8 through SB-10; Drawing 1). Boring SB-8 is proposed between the area of known highest onsite concentrations and the potential offsite source. However, since it is located onsite impacts at this location would not necessarily be the result of the offsite source. For this reason, borings SB-9 and SB-10 are proposed further upgradient to evaluate groundwater conditions directly upgradient of the Site. The combination of these boring locations should provide sufficient information to determine if offsite impacts are

affecting groundwater beneath the Site. As is presented in the Work Plan, the borings will be advanced to an approximate total depth of 20 to 25 ft bgs, based on first encountered water from the historic soil boring logs.

All methods of drilling, sampling, and analytical testing that were proposed in the Work Plan will be carried out for the additional borings proposed herein.

#### DOCUMENTATION AND REPORTING

Upon completion of the work activities described above and after receipt of laboratory analytical data, Broadbent will prepare a Vapor Intrusion, Soil and Groundwater Investigation Report containing the following information at a minimum:

- Descriptions of the work performed
- Copies of the required permits
- Copies of the field notes
- Tabulated results and measurements
- Laboratory analytical reports with chain-of-custody records
- A Conceptual Site Model (CSM)

#### PROPOSED SCHEDULE

The schedule for the above-noted work is proposed to proceed as follows:

- Implement Investigation Activities– Within 45 days of receiving regulatory approval.
- Submission of Vapor Intrusion, Soil and Groundwater Investigation Report – Within 90 days of receiving regulatory approval.

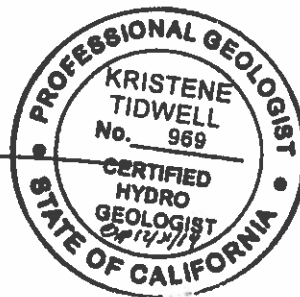
#### CLOSURE

Should you have questions or require additional information, please do not hesitate to contact me at (707) 455-7290.

Sincerely,  
BROADBENT & ASSOCIATES, INC.



Kristene Tidwell, P.G., C.H.G.  
Associate Hydrogeologist



#### Attachments

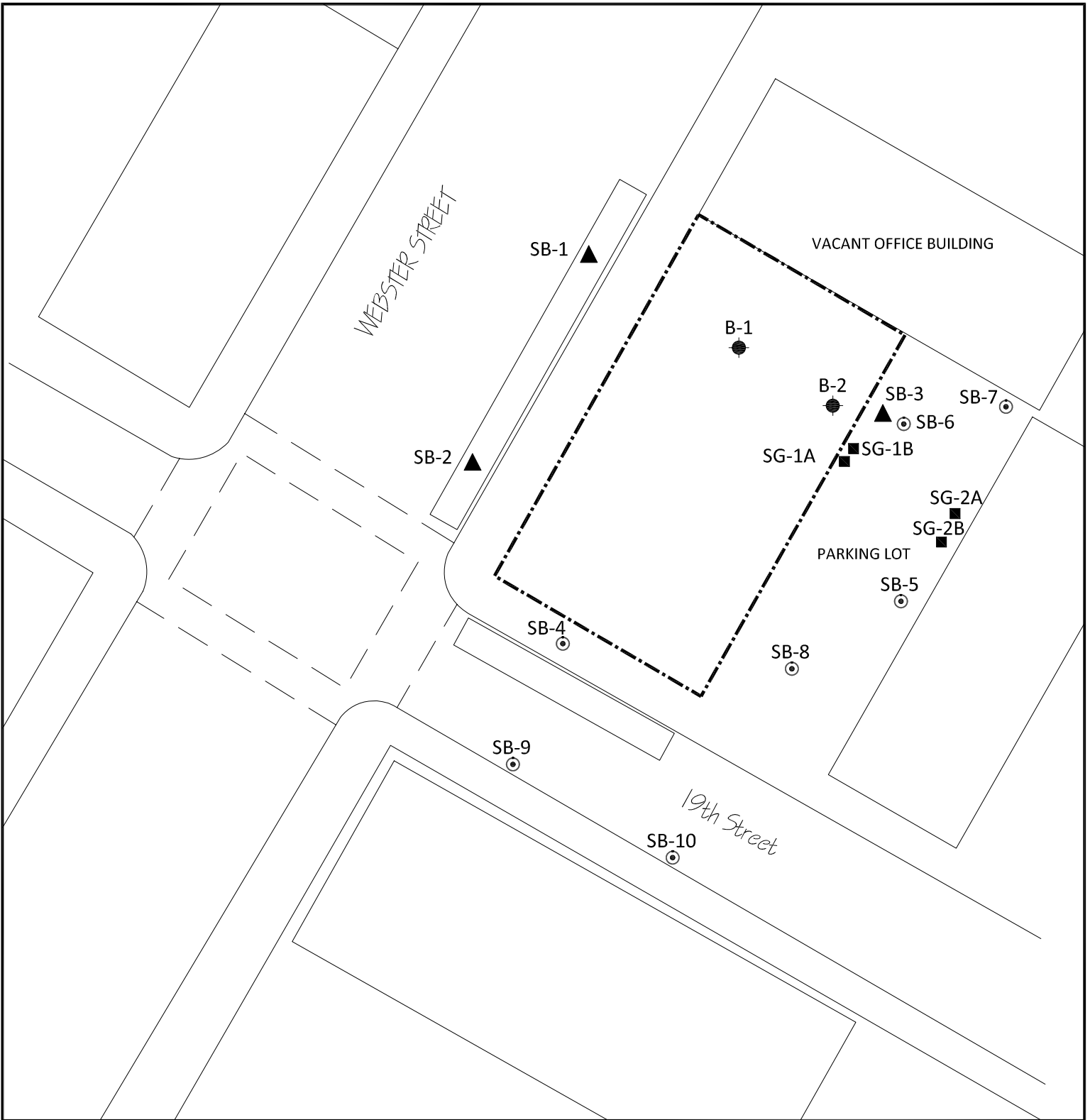
Drawing 1 Site Map with Proposed Soil Borings and Soil Vapor Points

## References

Broadbent & Associates, 2014. Work Plan for Groundwater and Vapor Intrusion Assessment. Atlantic Richfield Company Station No. 596A4, 1900 Webster Street, Oakland California, ACEH Case No. RO 0003100. March 5.

P&D Environmental, 2014. Subsurface Investigation Report. 1900 Webster Street, Oakland California,. June 11.

Cc: Ms. Karel Detterman, PG, Alameda County Environmental Health (submitted via ACEH ftp site)  
Electronic copy uploaded to GeoTracker



**LEGEND**

- ▲ 2011 AEI Soil Boring Locations
- 2012 AEI Soil Boring Locations
- ⊙ Proposed Soil Boring Locations
- Proposed Soil Vapor Points Locations

▭ Subject Property

